Fisher Body Company, Ohio
e. 140th Street and Coit Road
Cuyahoga County
Cleveland
Ohio

Photographs and
written historical data

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HAER, OH, 18-CLEV, 25H -

The Fisher Body Ohio Company
General Motors, Fisher Body Division
HAER OH-11H

NAME: Fisher Body Ohio Company

LOCATION: Cleveland, Ohio

DATE OF SETTLEMENT: 1919

PRESENT OWNER: General Motors

PRESENT USE: Parts manufacture and assembly

SIGNIFICANCE: First "big body plant" to operate in Cleveland, and the largest amount of permanent floor space ever built under one contract at one time. The plant bridges two eras in the Cleveland auto industry.

HISTORIAN: Tom Fisher

The Fisher Body Ohio Company
General Motors, Fisher Body Division

Fisher Body's Coit Road plant was "the first big body plant to operate in the city" of Cleveland.[1] The factory received "the largest permit ever issued in the State of Ohio from the standpoint of floor space," and had "probably the largest permanent floor space ever constructed under one contract at one time."[2]

The history of The Fisher Body Ohio Company begins in Norwalk, Ohio. The Fisher family operated a factory there for the building, painting, and repairing of carriages. The oldest of the six sons, Fred Fisher, left Norwalk in 1901 to work for the Detroit-based C. R. Wilson Body Company, eventually becoming a superintendent for the firm.[3] On July 22, 1908, Fred and his brother Charles Fisher founded The Fisher Body Company in Detroit.[4] One of the first companies to build closed body cars, Fisher received its first order for 150 closed bodies from Cadillac in 1910.[5] The two Fisher brothers organized The Fisher Closed Body Company in December of that year. In 1916, the Fisher Body and the Fisher Closed Body companies merged, forming The Fisher Body Corporation. Three years later, the newly formed General Motors Corporation bought a 3/5 interest in Fisher Body.[7]

The year 1919 also brought the formation of The Fisher Body Ohio Company, a subsidiary of the parent corporation with an authorized capitalization of $10,000,000.[8] The subsidiary was first directed from Detroit, with Fred Fisher as president and Charles Fisher as vice-president. In the 1920's their younger

brother, Edward Fisher, became plant manager of the Ohio Company, giving a management autonomy that is still in effect.[9]

In 1919, The Fisher Body Ohio Company bought a 45 acre site at the corner of Coit Road and E. 140th Street in Cleveland. While conveniently located next to the Cleveland Short Line and the New York Central Railroad tracks, the site contained a large pond and a meandering Nine Mile Creek.[10] Three-quarters of the property stood within the creek's overflow basin. The Fisher Body Ohio Company hired Detroit architect, Albert Kahn, and his associated engineers, F. K. Boomhower and Gordon Turnbull, to design the factory.[11]

Kahn placed the body shop in a six-story structure ("A" building) parallel to Coit Road.[12] The 72 foot by 1,297 foot building had 24 foot square bays with circular mushroom bolumns supporting octagonal drop-panel, flat-slab concrete floors. The concrete frame was exposed on the exterior, its bays infilled with industrial-sash windows, stone sills, and brick spandrels. Four evenly spaced towers along the Coit Road facade had projecting parapets with diaper-patterned brick panels and concrete belt-courses. Four rear towers, 20 feet by 50 feet, contained elevators, stairs, and toilets. Creosoted wood blocks covered all of the floor surfaced in the factory.

Intersecting the body building at an angle parallel to E. 140th Street was a mill building ("B" building.) It stood 615 feet long and 300 feet wide slightly-gabled monitor-roofs

traversing the building. The section of the mill building closest to the body shop stood one-story tall, with 20 foot by 60 foot bays. North of that section stood a 180 foot by 300 foot lumber storage department, two stories tall with 20 foot square bays. North of that stood a 40 foot by 300 foot craneway and a 162 foot by 300 foot, two story dry kiln area. That section had 32 kilns in the basement and a dry lumber storage area on the upper floor.

Parallel to the mill building, 120 feet to the east, stood three adjacent structures: the press building, the train shed, and the stock room. The steel-framed press building ("D" building) was 120 feet wide, 460 feet long, and 50 feet tall, with 24 foot by 60 foot bays. The structure contained two 15-ton cranes and was lit by a V-shaped monitor roof. Next to the press building stood a 60 foot wide by 490 foot long train shed ("F" building), containing two rail sidings and two loading platforms. The shed had steel trusses supporting a gables monitor and a pre-cast cement-tile roof. Next to the train shed stood a 72 foot by 521 foot stock room ("G" building.) Like the body shop,the stock room had a reinforced-concrete, flat-slab structure with 24 foot square bays designed to carry six stories. Kahn's initial plans called for the construction of only the first floor and basement.

Parallel to the stock building, 588 feet to the east, stood a six-story paint shop. That shop had two sections: a

606 foot by 120 foot wing facing E. 140th Street, and a 362 foot by 120 foot section intersecting the body shop at an angle. The paint shop maintained the latter's flat-slab construction and its rear elevator and stair housings. A corner office building, facing the Coit Road / E. 140th Street intersection, and a power house, situated north of the press shop, were not included in the initial building permit signed by Albert Kahn.

The Fisher Body plant followed the format of Kahn's Highland Park plant for Ford, with multi-story assembly buildings enclosing lower machining and milling structures. The Fisher Body plant also took its design cues from its site, for the perimeter buildings and the attached one and two story structures stood on the property's few dry areas.

On March 16, 1920, The Fisher Body Ohio Company awarded The Thompson-Starrett Company with the $6,000,000 building contract.[13] Excavations were begun within a week, although heavy rains that spring slowed construction. The contractors cut a channel and laid a concrete culvert at the back of the site to divert Nine Mile Creek, and used 100,000 yards of excavated dirt to fill the pond.

The Thompson-Starrett Company operated two contracting plants at the site, each with a one-yard Smith cement mixer and overhead bins for aggregate storage. Contracting plant #1 stood at the juncture of the stock and body buildings, delivering concrete to three 160 foot Insley steel towers located 230 feet

apart along Coit Road, and to a line chute leading to the rear of the stock building. That plant received its materials along a 24-inch belt conveyor connected to hoppers underneath a temporary rail siding. The contractor's second plant stood midway down the mill building, immediately adjacent to a temporary rail siding. Plant #2 had a 200-foot hoisting tower which delivered concrete through line chutes to two 160 foot Insley towers along Coit Road and to a hopper in the mill building from which concrete was buggied.

The Thompson-Starrett contract differed from the original building permit. The contract did not include the 120-foot wide paint shop wing, making the body shop only 1,2000 feet long; while it did include the previously omitted power house. The power house, standing 120 feet east of the mill building and 120 feet north of the press building, had a steel frame with brick facing and industrial-sash windows. The structure's 114 foot by 93 foot dimensions contained two sections: a 114 foot by 55 foot boiler room standing 44 feet tall and a 114 foot by 38 foot machine room, 33 1/2 feet tall. Above the boiler room stood a 900 ton coal bunker. A 225 foot, radial-brick Custodis chimney, 11 feet in diameter, stood next to the boiler room and a 190 foot water tank stood in front of the machine room. The power plant furnished heat and water to the factory and compressed air and hydraulic power to the press building.[14]

Coal entered the boiler house from an adjacent rail siding.

The fuel was discharged into an apron conveyor, carried to a Stephens-Adams double-roll crusher operated by a 25 horsepower Allis-Chalmers engine, delivered to a bucket conveyor, and dumped into the overhead Beaumont coal bunkers. Controlled by a moveable tripper, the coal then moved to a two-ton eldctric larry which weighed the coal and delivered it to the boiler stockers. The Stephens-Adams bucket conveyor system then picked-up ash, delivered by ash cars through a series of grizzlies, and carried it to a bunker over the rail siding, where it was discharged.

Sawdust from the mill building also fueled the boilers. Grand Rapids blowers moved the sawdust to receiving bins in the plant yard and then to cyclones on the roof of the power house. The wood fuel dropped into an overhead bunker and, from there, to a conveyor with spouts leading to each boiler.

Two Bayley fans, each with 80 horsepower Troy engines, supplied the furnaces with a forced draft. Two Lea-Courtenay centrifugal pumps, driven by 70 horsepower Moor steam turbines, delivered feed water to the boilers through a 4-inch main header. Feed water also came from condensate off of the steam lines, which was recycled through a 300 horsepower open Cochrane heater.

The boiler room contained five 550 horsepower Union horizontal water-tube boilers. Each boiler had a Combustion Engineering stocker, a Bailey meter, a Stets regulator, two Homestead safety valves, and five Vulcan soot blowers. Eight-inch automatic stop

and check valves and 8-inch vertical headers took the steam from the boilers to the main 12-inch header. That steam, in turn, operated three Alberger closed water heaters connected to the plant's forced hot water heating system. Three Kingsford centrifugal pumps, driven by 175 horsepower Kerr steam turbines, moved water through the American Radiator system.

Two Alberger heaters, with a Goulds centrifugal pump and a General Electric induction motor provided domestic hot water to the plant. A ten-ton Artic refrigeration unit, with a Deming triplex pump and Goulds booster pumps, supplied the plant with drinking water. The factory's hydraulic equipment included two 3000 pound Elmes reciprocating hydraulic pumps with 150 horsepower General Electric motors and two 500 pound Elmes pumps with 30 horsepower G. E. motors. Two cross-compound Bury air compressors, one steam driven and the other electrically-operated by a 185 horsepower General Electric self-starting synchronous motor were, also located in the machine room.

When the power plant was completed in May, 1921, the cost of the Fisher Body plant had risen to $8,000,000.[15] The factory enclosed over 1,000,000 square feet of floor area, making it "the largest single unit automobile body manufacturing plant in the world."[16] Yet, The Fisher Body Ohio Company had no work. The Chandler Motor Car Company, which Fisher had intended to supply with bodies, experienced a drop in sales during the 1920 recession. In November, 1921, The Fisher Body Ohio Company

finally received a contract for Chevrolet's closed bodied automobiles, allowing the plant to reach a first year production rate of 150 bodies per day.[17] By 1924, that rate had increased to 600 per day with the company supplying Chandler, Cleveland, Chrysler, Oakland, and Chevrolet with bodies.[18]

Under the direction of Edward Fisher, The Fisher Body Ohio Company introduced several innovations in automobile body manufacturing. In 1923, the company "initiated the knock-down system of shipping bodies," and pioneered the use of lacquer for body finish, thus reducing cost and making color styles possible."[19] In 1925, it became the first auto body manufacturer to use a moving conveyor line in its assembly process.[20]

The prosperity of The Fisher Body Ohio Company after 1921 demanded a series of plant expansions that continued through the Depression. In July, 1923, the Austin Company built a die-storage building ("C" building) between the mill building and press building. Standing 300 feet long, 120 feet wide, and 12 feet tall, it had a gabled wood-plank roof with steel purlins supported by brick corbels set in the existing walls. The following month, company architects designed a steel-framed, gable roofed train shed ("H" building) 541 feet long and 78 feet wide. It stood along the eastern wall of the stock building.

In January, 1924, the company added a 40 foot by 120 foot metal storage building to the end of its die storage structure, repeating the latter's steel-framed gabled-roof construction.

In August, 1924, the Hunkin Conkey Construction Company added five floors of flat-slab construction to the stock building ("G" building), bringing it level with the six-story body shop. In March, 1925, the contractor Jerome A. Utley added a 220 foot by 80 foot strip steel storage building ("C" building) to the end of the press building. Those additions reflected Fisher's increasing use of metal in its automobile bodies.

Those additions also marked the last construction of The Fisher Body Ohio Company. On June 30, 1926, The General Motors Corporation purchased the outstanding majority of Fisher Body's stock, making the company its sole body building division.[22]

In October, 1926, the new owners began several new additions to the Coit Road plant. Hunkin Conkey built a steel-framed, brick faced power house addition, 109 feet long and 62 feet wide. That contractor also built a one-story steel-framed gable-roofed salvage building ("I" building) along one side of the train shed; a 48 foot by 72 foot two-bay extension to the six story body shop; and a 183 foot by 57 1/2 foot two-story office building facing Coit Road. The office had a symmetrical facade with a segmentally-arched entrance, two-story brick pilasters, a concrete entablature, and a gabled parapet with a central shield. The office building's location next to the body shop suggests that Albert Kahn's plans for a point shop along E. 140th Street had been abandoned by 1926.

In June, 1927, the company built a 48 foot by 36 foot

Acetylene generator building, ten feet from the back of the property, connected to the plant through a tunnel. Company architects, in 1930, designed a one-story, monitor roof steel-framed storage building ("C" building), 400 feet long and 85 feet wide, between the power house and mill building. In 1934, Jerome A. Utley extended that storage building eight bays, for an extra 160 feet. A 290 foot by 138 foot one-story steel-framed press shop ("D" building) was added north of the power house in 1934. The Albert M. Higley Company, in August, 1937, began construction of a 376 foot by 60 foot tool and die department ("B" building). It occupied the northeast corner of the mill building and extended 100 feet beyond that building's end wall.[23]

That ended major construction at the Fisher Body plant for the next 24 years. By 1936, the Depression had significantly lowered the demand for automobiles and thus the need for plant expansion. General Motors ended body assembly operations at the Coit Road plant that year, retooling it for metal and trim fabrication, and bringing on one of the worst strikes of the Depression as a result of its lay-offs.[24] The subsequent union activity at the Coit Road plant marked the end of Fisher Body as a pateralistic, family-run business and its initiation into the world of corporate giants.

During World War II, the plant made marine diesel engine crankcases, engine nacelles, and various aircraft and tank parts. The factory, a leader in its installation of safety devices on machinery, had some of the largest metal presses then in operation.[25]

In 1946, automobile sub-assembly production resumed, with a staff of 4,000 and an output of 5,000 bodies per day.[26]

In December, 1961, General Motors announced a large expansion program at its Fisher Body Coit Road plant. That program included the erection of a 194 foot, 250,000 gallon water tower, "the highest of its type in Cleveland;" a parts finishing building over the train shed ("H" building); a baling room for excess metal east of the power house; a stamping press room addition south of the power house; a steel storage building north of the mill building; and five acres of new parking at the north end of the site. In April, 1971, the plant opened a waste treatment facility south of the new parking area.[27]

All of the factory's original machinery and equipment has been replaced. Only the plant's structural shell and such architectural elements as metal and glass partitions, wood block floors, and ceiling mounted fans remain from earlier periods.

The Fisher Body Doit Road plant bridges two eras in the Cleveland automobile industry. Built in 1920, at the height of the early industry, it remained in operation through World War II, when a second generation of Detroit-controlled automobile assembly plants were built in Cleveland. The continuously operating Fisher Body plant provides a fitting ending to the story of Cleveland's auto industry, for that industry never really ended. The city's active parts industry and its many assembly plants makes Greater Cleveland still the nation's "second motor city."[28]

(Fisher) Footnotes

1. William Ganson Rose, Cleveland - The Making of a City, World Publishing Company, Cleveland, 1950, p 808.
2. V. E. Winell, "Auto Body Plant Built of Reinforced Concrete," Concrete, April, 1921, p 161.
3. General Motors Corporation, The Story of Fisher Body, Detroit, p 3.
4. Ibid.
5. Ibid., p 4.
6. David J. Wilkie, Esquire's American Autos and their Makers, Esquire Publishing Company, New York, 1963, p 135.
7. G. M., Fisher Body, p 5.
8. Cleveland City Directors, 1919.
9. Mr. Fred DiFrancisco, Fisher Body engineer, interview, September 24, 1979.
10. Winell, "Auto Body Plant," Concrete, 1921, p 161.
11. "The New Plant of the Fisher Body Ohio Company," Power Plant Engineering, Chicago, February 15, 1922, p 209.
12. Cleveland Building Permits, Cleveland City Hall.
13. Winell, "Auto Body Plant," Concrete, 1921, p 161.
14. Ibid., "New Plant," Power Plant Engineering, 1922.
15. Ibid., p 201.
16. Ibid.,
17. Fisher Body Division, General Motors Corporation, "Welcome to Fisher Body, Cleveland Coit Road Plant," August, 1976.
18. Ibid.
19. Rose, Cleveland, 1950, p 808-809.
20. Ibid.
21. Cleveland Building Permits, Cleveland City Hall.
22. G. M., Fisher Body, p 5.
23. Cleveland Building Permits, Cleveland City Hall.
24. DeFrancisco, interview, September 24, 1979.
25. Rose, Cleveland, 1950, p 808-809.
26. Rose, Cleveland, 1950, p 808-809.
27. Cleveland Press, December, 1961, Cleveland Public Library, Clipping File, Cleveland.
28. Wager, Golden Wheels, p 132.

Addendum to

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